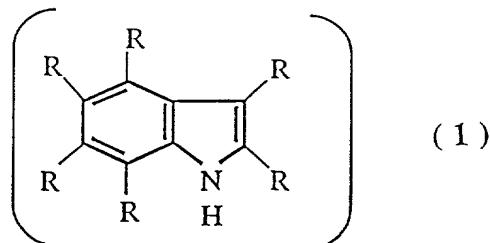


What is claimed is:

1. A secondary battery containing an indole polymeric compound as an electrode active material, said indole polymeric compound using a proton as a charge carrier and having a constituent represented by general formula (1):



wherein each R denotes a hydrogen atom, a halogen atom, a hydroxyl group, a carboxyl group, a sulfonic group, a sulfuric acid group, a nitro group, a cyano group, an alkyl group, an aryl group, an alkoxy group, an amino group, an alkylthio group and an arylthio group, which may be the same or different from each other, and at least one R is a substituent other than a hydrogen atom.

2. The secondary battery according to claim 1, having an indole polymeric compound electrode containing 30-95% by weight of said indole polymeric compound.

3. The secondary battery according claim 1, having an
aqueous or a nonaqueous solution of an electrolyte containing
 10^{-3} mol/l to 18 mol/l of protons.

4. The secondary battery according claim 1, having an aqueous or a nonaqueous solution of an electrolyte containing
30 10^{-1} mol/l to 7 mol/l of protons.

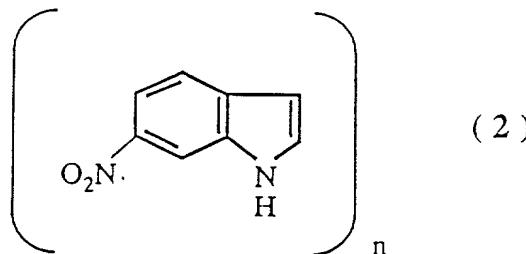
5. The secondary battery according to claim 2, having an aqueous or a nonaqueous solution of an electrolyte containing 10^{-3} mol/l to 18 mol/l of protons.

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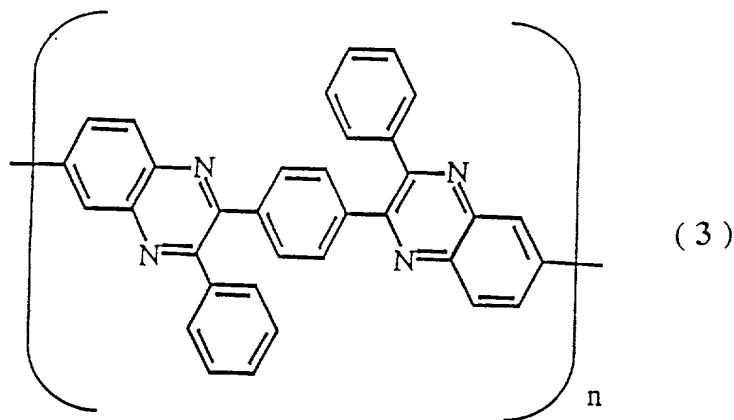
6. The secondary battery according claim 2, having an

aqueous or a nonaqueous solution of an electrolyte containing 10^{-1} mol/l to 7 mol/l of protons.

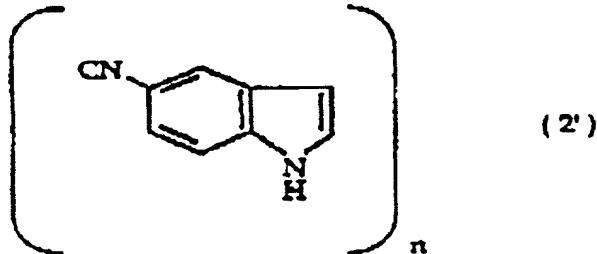
7.. A secondary battery comprising an anode containing
5 poly(6-nitroindole) represented by structural formula (2):



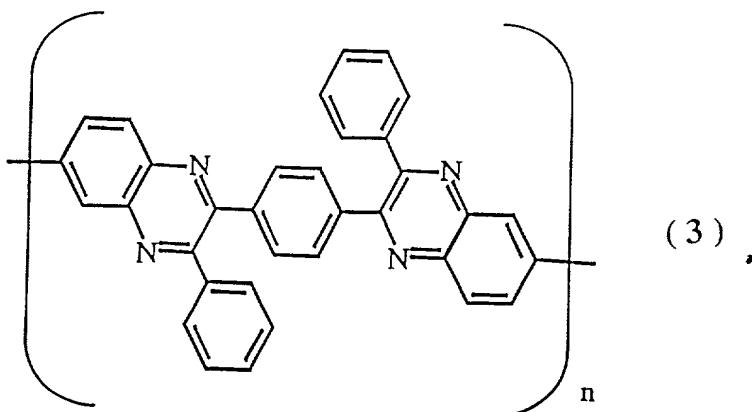
a separator, an electrolytic solution of 40% sulfuric acid, and a cathode containing polyphenylquinoxaline represented by structural formula (3):



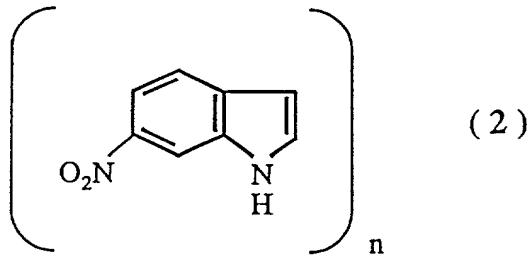
8. A secondary battery comprising an anode containing
25 poly(5-cyanoindole) represented by structural formula (2'):



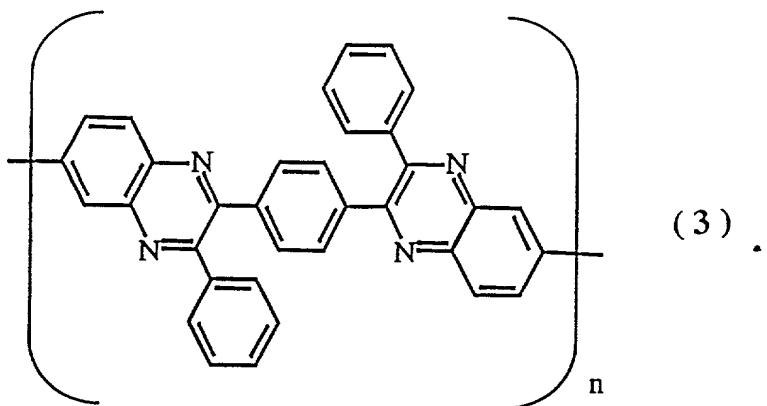
a separator, an electrolytic solution of 40% sulfuric acid, and a cathode containing polyphenylquinoxaline represented by structural formula (3):



10 9. A secondary battery comprising an anode containing poly(6-nitroindole) represented by structural formula (2):

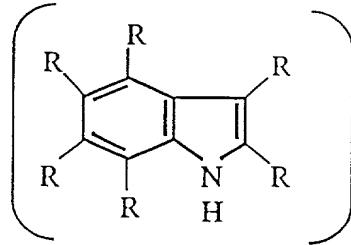


20 a separator, an electrolytic solution of 1 mol/l of tetraethylammonium tetrafluoroborate and 0.1 mol/l of trifluoroacetic acid, and a cathode containing polyphenylquinoxaline represented by structural formula (3):



35 10. A capacitor containing an indole polymeric compound as an electrode active material, said indole polymeric compound using a proton as a charge carrier and having a constituent represented by general formula (1):

5



(1)

wherein each R denotes a hydrogen atom, a halogen atom, a hydroxyl group, a carboxyl group, a sulfonic group, a sulfuric acid group, a nitro group, a cyano group, an alkyl group, an aryl group, an alkoxy group, an amino group, an alkylthio group and an arylthio group, which may be the same or different from each other, and at least one R is a substituent other than a hydrogen atom.

11. The capacitor according to claim 10, having an indole polymeric compound electrode containing 30-95% by weight of said indole polymeric compound.

12. The capacitor according to claim 10, having an aqueous or a nonaqueous solution of an electrolyte containing 10^{-3} mol/l to 18 mol/l of protons.

13. The capacitor according to claim 10, having an aqueous or a nonaqueous solution of an electrolyte containing 10^{-1} mol/l to 7 mol/l of protons.

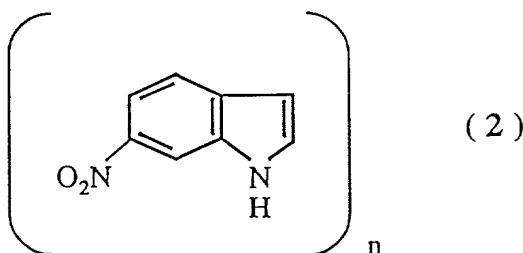
14. The capacitor according to claim 11, having an aqueous or a nonaqueous solution of an electrolyte containing 10^{-3} mol/l to 18 mol/l of protons.

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15. The capacitor according to claim 11, having an aqueous or a nonaqueous solution of an electrolyte containing 10^{-1} mol/l to 7 mol/l of protons.

35 16. A capacitor comprising an anode containing poly(6-nitroindole) represented by structural formula (2):

5



(2)

a separator, an electrolytic solution of 40% sulfuric acid, and
a cathode containing polyaniline.